# State of Iowa - Return on Investment Program / IT Project Evaluation

**Tracking Number (For Project Office Use)**

## SECTION 1: PROPOSAL

Project Name: Backup server and workstation replacement Date: 09/10/00

Agency Point of Contact for Project: Chuck Levy

Agency Point of Contact Phone Number / E-mail: 242-5362 / chuck.levy@icva.state.ia.us

Executive Sponsor (Agency Director or Designee) Signature: _____

| | | |
|---|---|---|
| Is this project necessary for compliance with a Federal standard, initiative, or statute? (If "Yes," cite specific requirement, attach copy of requirement, and explain in Proposal Summary) | ❑ Yes | **X** No |
| Is this project required by State statute? (If "Yes," explain in Proposal Summary) | ❑ Yes | **X** No |
| Does this project meet a health, safety or security requirement? (If "Yes," explain in Proposal Summary) | ❑ Yes | **X** No |
| Is this project necessary for compliance with an enterprise technology standard? (If "Yes," explain in Proposal Summary) | ❑ Yes | **X** No |
| Does this project contribute to meeting a strategic goal of government? (If "Yes," explain in Proposal Summary) | **X** Yes | ❑ No |
| Is this a "research and development" project? (If "Yes," explain in Proposal Summary) | ❑ Yes | **X** No |

### PROPOSAL SUMMARY:

In written detail, explain why the project is being undertaken and the results that are expected. This includes, but is not limited to, the following:

1. A pre-project (before implementation) and a post-project (after implementation) description of the system or process that will be impacted.

Pre-project: All data is processed and stored within the ICVA's currently installed file server. Any problems with this unit or software will take the network down and office productivity will cease until the problems are resolved, as the critical files are available only in an electronic media format within our office. If this problem is with the computer equipment, our office could be unable to provide these critical documents for days or possibly weeks. Fragile paper copies of these documents are available, but their availability is minimal and searching of these records would be extremely time consuming.

Workstations are over 3 years old currently. By the time implementation of this project, they will have been in the office for over 4 years. The State of Iowa Standard S-TA-001-001 recommends a depreciation and replacement cycle of 36 months.

Post-project: With the backup server in place and new workstations in all administrative staff areas, critical documents will be available at all times to any citizen that requires them. The larger amount of data used within our office can be handled with ease with the newer systems online. Any problems with hardware or software with the main file server can now be sidestepped until a timely repair can be implemented, by transferring control to the backup server with only a momentary interruption of service.

2. A summary of the extent to which the project provides tangible and intangible benefits to either Iowa citizens or to State government. Included would be such items as qualifying for additional matching funds, improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, complying with enterprise technology standards, meeting a strategic goal, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, complying with federal or state laws, etc.

The installation of a backup server and uninterruptible power supply, along with the replacement of 3-year-old workstations is the purpose of this project. These pieces of hardware are necessary and essential to the protection of the vital military records stored on electronic media within our department. A backup system is critical to the continued seamless operation of the ICVA's information systems. It is our belief that these systems should already be in place within the environment and without these protection measures, our department is at risk of losing it's ability to provide military records upon demand. After the transfer of the documents to electronic media, the paper copies were moved to secure storage in the historical archives. Retrieving these documents in a situation where our equipment malfunctions would be a very time consuming task at best and without the backup system, the only method available to our office. With the military data becoming more in demand by veterans and other Iowans, we will need a dependable arrangement within the office to assure this information will be available when requested.

As we upgrade our network systems and servers, and as the information our office processes becomes more complicated and data intensive, our workstations have become less able to process the same data in an efficient manner, due mostly to slower processor speeds, smaller hard drives and less system memory.

3. A summary that identifies the project stakeholders and how they are impacted by the project.

Stakeholders: ICVA administrative staff, State departments sharing data with the ICVA and the general public. With a safe and secure source of information and a state office with current equipment, these stakeholders' interests will be preserved.

## SECTION 2: PROJECT PLAN

Individual project plans will vary depending upon the size and complexity of the project. A project plan includes the following information:

### 1. Agency Information

**Project Executive Sponsor Responsibilities:** Identify, in Section I, the executive who is the sponsor of the project. The sponsor must have the authority to ensure that adequate resources are available for the entire project, that there is commitment and support for the project, and that the organization will achieve successful project implementation.

Brian Bales, Executive Director of Iowa Commission of Veteran's Affairs, will be the sponsor of this project. A decision package for the ICVA's budget will provide funds for this project. ICVA's commitment and support for this project will consist of the designation of a project administrator, whose responsibility will be to verify accuracy of the finished work, and to keep all areas of the project on task and within timetable constraints.

**Organization Skills:** Identify the skills that are necessary for successful project implementation. Identify which of these skills are available within the agency and the source(s) and acquisition plan for the skills that are lacking.

The ICVA IT staff will supply the needed knowledge and experience for installation of the backup server, UPS and replacement workstations. The ICVA IT staff will do all work necessary for timely completion of this project.

## 2. Project Information

**Mission, Goals, Objectives:** The project plan should clearly demonstrate that the project has developed from an idea to a detailed plan of action. The project plan must link the project to an agency's mission, goals, and objectives and define project objectives and how they will be reached. The project plan should include the following:

A. **Expectations**: A description of the purpose or reason that the effort is being undertaken and the results that are anticipated.

To ensure the integrity of the data systems within the office environment of the ICVA, a backup server and UPS is a central part to keeping the ICVA enterprise working at all times. Workstation upgrades will keep all members of the ICVA staff working and communicating at a level of compatibility, in comparison to newer systems in place already in the workplace.

With the ever-increasing size and complexity of the files and applications that the ICVA works with, and with the department's future goals of connecting to other State offices via secure network and Internet connections, this project will be a necessary part of the continuing smooth operation of the Commission's business objectives. Without these hardware changes, the operation of the office is in jeopardy of being unable to meet citizen demand for our records.

B. **Measures**: A description of the set of beliefs, tradeoffs and philosophies that govern the results of the project and their attainment. How is the project to be judged or valued? What criteria will be used to determine if the project is successful? What happens if the project fails?

As new equipment is put into place within the office environment, system checks and testing will determine whether the new network will provide the solution desired. One of the quality assurance measures will be to verify connections to the backup server with a lab setup before rollout to the office. A smooth changeover to the backup server will be the determination of success for this project. Failure of the project will leave the ICVA open to possibility of system loss without any measures of quick replacement. With more than 30 requests per day from Iowa citizens and many more requests from service organizations and Veteran health care providers, we cannot allow our office to be offline for any number of days. Critical care to ailing veterans and their families must be provided in a matter of hours not days.

C. **Environment:** Who will provide input (e.g., businesses, other agencies, citizens) into the development of the solution? Are others creating similar or related projects? Are there cooperation opportunities?

There are in place protection systems much like detailed here for the backup of valuable data. A standby or backup server is commonplace for data preservation.

D. **Project Management and Risk Mitigation**: A description of how you plan to manage the project budget, project scope, vendors, contracts and business process change (if applicable). Describe how you plan to mitigate project risk.

The project's budget will be managed by the ICVA. A project manager will be assigned from the ICVA to oversee each stage of work in the project. As each set of upgrades are completed, and after verification of the accuracy of the installation, the data handling systems will be rolled over into the new implementation.

E. **Security / Data Integrity / Data Accuracy / Information Privacy**: A description of the security requirements of the project? How will these requirements be integrated into the project and tested. What measures will be taken to insure data integrity, data accuracy and information privacy?

All current standards of data protection and integrity are in place within the office of the ICVA and will continue throughout the project. The ICVA staff will undertake all changes to the system

## 3. Current Technology Environment (Describe the following):

### A. Software (Client Side / Server Side / Midrange / Mainframe)

- Application software
- Operating system software
- Interfaces to other systems: Identify important or major interfaces to internal and external systems

The operating system for individual workstations is Microsoft's Windows NT 4.0 Workstation and for the server, Windows NT 4.0 Server. Business applications on the server include: Microsoft Exchange Server, Arcadia Executive Backup, Norton Anti-Virus and other miscellaneous software tools. For workstations: Microsoft Office 97, Outlook 98, Adobe PhotoShop and PageMaker, Microsoft Internet Explorer and ImageMax FileTrax.

### B. Hardware (Client Side / Server Side / Mid-range / Mainframe):

- Platform, operating system, storage and physical environmental requirements.
- Connectivity and Bandwidth: If applicable, describe logical and physical connectivity.
- Interfaces to other systems: Identify important or major interfaces to internal and external systems.

A dual processor based 500 MHz files server with more than 21 GB of storage space and connected to the ICVA's 10 MB Ethernet network. The six workstations are Pentium II 166 MHz Compaq Deskpro machines, with 1 GB hard drives and 64 M of RAM. Currently there are no external interfaces to the file server beyond the National Guard router and Internet installation. Internal interfaces are limited to individual workstations connected to the file server via CAT-5 cabling and Ethernet hubs.

**4. Proposed Environment (Describe the following):**

A. Software (Client Side / Server side / Mid-range / Mainframe)

- Application software.
- Operating system software.
- Interfaces to other systems: Identify important or major interfaces to internal and external systems.
- General parameters if specific parameters are unknown or to be determined.

There will be no changes to the software end of the project. Current software already in place within the office will work with the new hardware as is. An additional copy of the server software will be a needed purchase for the new server.

B. Hardware (Client Side / Server Side / Mid-range / Mainframe)

- Platform, operating system, storage and physical environmental requirements.
- Connectivity and Bandwidth: If applicable, describe logical and physical connectivity.
- Interfaces to other systems: Identify important or major interfaces to internal and external systems.
- General parameters if specific parameters are unknown or to be determined.

Six new Intel based Pentium II or III workstations with 400 MHz processors, 4 GB hard drives and 128 M of system memory, minimum (including monitors). Intel based Pentium III server with minimum 500 MHz processor, more than 40 GB of hot-swappable SCSI drives and 256 M of RAM. Uninterruptible Power Supply should be able to withstand loads up to 300 VA.

**Data Elements:** If the project creates a new database the project plan should include the specific software involved and a general description of the data elements.

N/A

**Project Schedule:** A schedule that includes: time lines, resources, tasks, checkpoints, deliverables and responsible parties.

- Purchase of equipment: shipping time – approximately 2-3 weeks.
- Installation of equipment: 7-10 days.
- Testing of new system in lab conditions: 7-10 days.
- Rollout of new system to existing office environment: 3-7 days.

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## SECTION 3: Return On Investment (ROI) Financial Analysis

### Project Budget:

Provide the estimated project cost by expense category.

| | Total: | | Annual: |
|---|---|---|---|
| Personnel | $ 0.00 | | |
| Software | $ 0.00 | | |
| Hardware | $22,000 / 3 | = | $7,333. |
| Training | $ 0.00 | | |
| Facilities | $ 0.00 | | |
| Professional Services | $ 0.00 | | |
| Supplies | $ 0.00 | | |
| Other (Maintenance) | $ 3,000 | = | $0 see annual maintenance cost below |
| Total | $25,000 | | $7,333 |

### Project Funding:

Provide the estimated project cost by funding source.

| | | |
|---|---|---|
| State Funds | $ 25,000.00 | 100 % of total cost |
| Federal Funds | $ | % of total cost |
| Local Gov. Funds | $ | % of total cost |
| Private Funds | $ | % of total cost |
| Other Funds (Specify) | $ | % of total cost |
| Total Cost: | $ | % of total cost |

Provide the estimated project cost by fiscal year.

Estimated project cost by fiscal year: FY 02 $25,000

How much of the cost would be incurred by your agency from normal operating budgets (staff, equipment, etc.)? …$ 0 0 %

How much of the cost would be paid by requested State IT project funds? $ 25,000.00 100 %

Identify, list, and quantify all annual maintenance expenses (State Share) related to the project.

$3,000 / 3 years = $1,000.

Identify, list, and quantify any other future expenses (State Share) related to the project.

N/A

## ROI Financial Worksheet Directions (Attach Written Detail as Requested):

**Annual Pre-Project Cost** -- Quantify, in written detail, all actual State government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process prior to project implementation. This section should be completed only if State government costs are expected to be reduced as a result of project implementation.

**Annual Post-Project Cost** -- Quantify, in written detail, all estimated State government direct and indirect costs associated with activity, system or process after project implementation. This section should be completed only if State government costs are expected to be reduced as a result of project implementation.

**State Government Benefit** -- Subtract the total "Annual Post-Project Cost" from the total "Annual Pre-Project Cost." This section should be completed only if State government costs are expected to be reduced as a result of project implementation.

**Citizen Benefit** -- Quantify, in written detail, the estimated annual value of the project to Iowa citizens**.** This includes the "hard cost" value of avoiding expenses (hidden taxes) related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses.

**Opportunity Value/Risk or Loss Avoidance Benefit** -- Quantify, in written detail, the estimated annual benefit to Iowa citizens or to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

**Total Annual Project Benefit** -- Add the values of all annual benefit categories.

**Total Annual Project Cost** -- Quantify, in written detail, the estimated annual new cost necessary to implement and maintain the project including consulting fees, equipment retirement, ongoing expenses (i.e. labor, etc.), other technology (hardware, software and development), and any other specifically identifiable project related expense. In general, to calculate the annual hardware cost, divide the hardware and associated costs by three (3), the useful life. In general, to calculate the annual software cost, divide the software and associated costs by four (4), the useful life. This may require assigning consulting fees to hardware cost or to software cost. A different useful life may be used if it can be documented.

**Benefit / Cost Ratio** – Divide the "Total Annual Project Benefit" by the "Total Annual Project Cost." If the resulting figure is greater than one (1.00), then the annual project benefits exceed the annual project cost. If the resulting figure is less than one (1.00), then the annual project benefits are less than the annual project cost.

**ROI** -- Subtract the "Total Annual Project Cost" from the "Total Annual Project Benefit" and divide by the amount of the requested State IT project funds.

**Benefits Not Cost Related or Quantifiable** -- List the project benefits and articulate, in written detail, why they (IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.) are not cost related or quantifiable. Rate the importance of these benefits on a "1 – 10" basis, with "10" being of highest importance. Check the "Benefits Not Cost Related or Quantifiable" box in the applicable row.

## ROI Financial Worksheet

| Annual Pre-Project Cost - How You Perform The Function(s) Now | |
|---|---|
| FTE Cost (salary plus benefits): | **$19,717.00** |
| Support Cost (i.e. office supplies, telephone, pagers, travel, etc.): | **$4,298.00** |
| Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.): | **$8,679.00** |
| **A. Total Annual Pre-Project Cost:** | **$32,694.00** |
| **Annual Post-Project Cost – How You Propose to Perform the Function(s)** | |
| FTE Cost: | **$3,110.00** |
| Support Cost (i.e. office supplies, telephone, pagers, travel, etc.): | **$1,000.00** |
| Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.): | **$0.00** |
| **B. Total Annual Post-Project Cost:** | **$4,110.00** |
| **State Government Benefit ( = A-B ):** | **$28,584.00** |
| **Annual Benefit Summary** | |
| State Government Benefit: | **$28,584.00** |
| Citizen Benefit (including quantifiable "hidden taxes"): | **$7,200.00** |
| Opportunity Value and Risk/Loss Avoidance Benefit: | |
| **C. Total Annual Project Benefit:** | **$35,784.00** |
| **D. Total Annual Project Cost:** | **$7,333.00** |
| **Benefit / Cost Ratio (C / D):** | **4.88** |
| **ROI (C – D / Requested State IT Project Funds):** | **114%** |
| **X Benefits Not Cost Related or Quantifiable (including non-quantifiable "hidden taxes")** | |

**Annual Pre-Project Cost** – Assuming office personnel using system and it's slowdowns and reboot times allowing 4 hours weekly for support staff @ 32.72/hr. and 10 hours weekly for ITS4 support @ 24.83/hr. These costs include time to re-sign in when network dropped, time lost in work for unsaved applications, reboot/reload time, restoring from backed up files and slower system resources access. Total $379.18/week or yearly FTE Costs = $19,717.00.

Support costs include the costs of bringing in outside vendors to support the installed server and troubleshoot any related problems related to system operation.

Other costs include cost of new server equipment, peripheral devices and associated miscellaneous media.

**Annual Post-Project Cost** – Costs drop substantially. The breakdown includes 30 minutes weekly for support and about 1.5 hours of ITS4 support time for network complications and maintenance. Using the same figures from above, Totals down to $59.81/week FTE Costs or $3,110.00 yearly.

Support costs include miscellaneous storage media, backup media and related.

Other costs include the yearly charge for access for the T-1 line and State Backbone access provided by ICN. $1,067.00/mo. for access charges and ICN support or $12,804.00, $4,500.00 for equipment maintenance agreements, along with small fees for DNS and newsgroup monthly charges.

**Citizen Benefit** – With this new system in place, the network slowdowns or outages that this office has currently been experiencing, will hopefully be eliminated or at worst brought down to bare minimum times. Estimating 10 people coming in to our office requesting documentation and 50 persons calling in with requests and a network outage at the time of the requests. 60 Iowa veterans taking 1 hour of lunchtime with a generous hourly wage amount of $10 would have to wait and try again at another time. This brings the citizen cost to approximately $600 per occurrence. Currently, outages/slowdowns are as infrequent as once per month or $7200 citizen cost yearly. This will be to the benefit of Iowa's veterans when these times are eliminated and all information requests can be carried out immediately.

**Total Annual Project Cost** – Project costs include: $22,000.00 for new workstations, a backup server and UPS and $3,000.00 for maintenance agreements.

The Iowa Commission of Veteran's Affairs has a commitment to provide Iowa's 286,000 veterans, veteran service organizations, and the spouses and family members of veterans who have given their lives in service to the United States with their military records when needed. As these veterans age, it becomes critically important that the ICVA is able to provide these 4 million electronic records using state-of-the-art hardware and software and to not allow the older, slower systems to affect how benefits and aid can be provided to the veteran. By ensuring that these necessary documents are easy to locate and retrieve those organizations that depend on these papers to admit or process benefit applications will be able to do so with a minimum amount of wasted time. In the eyes of the older Iowa veteran in need of this medical care or service, this "improvement" will be an expected necessity.